Determination of Public Land (Rangeland) Health for 64083 285 HI-LINE

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on the assessments, it is my determination that the public land within the 285 Hi-Line allotment #64083 meets the Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ Jerry Dutchover . 08/10/2012 .

Assistant Field Manager Date

Standards of Public Land Health
Evaluation of 64083 285 HI-LINE Allotment
[08/01/2012]

The Roswell Field Office conducted rangeland health assessments at 2 study sites within 64083 285 HI-LINE. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
64083-SOUTH-A169	X			X			N/A		
64083-XHIGHWAY-N001 (*)	X			X	*		N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on 285-HiLine, allotment #64083. Ten of these assessed soil site stability, 11 hydrologic functions and 13 for biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on 2 trend plot locations within this allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office, which include some or all of the following: ground and vegetative cover and composition, production, frequency and ecological condition. These collections were initiated in the late 1970's/early 1980's, are scheduled and conducted approximately every 5 to 10 years.

This allotment contains 1,240 acres of public land, 80 acres of state lease land and 1,133 acres of private surface. This is a "C" (Custodial) category allotment. The studies are located on a Shallow SD-3 ecological site and on a Loamy SD-3 ecological site. At each of the locations, a majority of the Attributes/Indicators was rated as "None to Slight" or "Slight to Moderate" departure from the ecological site description. The team did note at both locations the indicator for Plant Mortality/Decadence was rated as "Moderate" to "Moderate to Extreme" as a reflection of the ongoing drought conditions. Plants were noted as being dormant. The average growing season precipitation on this allotment for the last three years is 5.49 inches, however, last year (2011) only 3.23 inches of precipitation were received; this year (2012) only 2.76 inches of precipitation have been received during the growing season. Given adequate precipitation, this indicator should change as plants respond.

The (*) indicates that the assessment had one or more indicator(s) rated moderate/extreme or extreme. These indicators are:

- Plant Mortality/Decadence
- Litter Amount

These indicators by themselves are not enough to rate the site as not meeting a standard but may warrant future monitoring.

Recommendations: As a majority of the indicators were rated as a "None to Slight" or "Slight to Moderate" departure from the ecological site descriptions, this allotment is rated as "Meeting" the standard for Rangeland Health. Continue the rangeland monitoring studies to insure proper stocking rates are maintained and that the perennial grass-cover and good plant composition remains.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64083-SOUTH-A169			
Legal Land Desc	NENE 14 0150S 0250E Meridian 23	Acreage	360
Ecosite	042CY025NM SHALLOW SD-3	Photo Taken	Y
Watershed	13060007080 HAGERMAN		
Observers	PEIRCE/BRAUND/BURKHARDT	Observation Date	08/01/2012
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Tg	Soil Taxon Name	TENCEE
Texture Class	NM666 L	Soil Phase	TENCEE-UPTON
Texture Modifier	NM666 GRAVELLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	7.51	NOAA Growing Season Precipitation	5.49
NOAA Avg Annual Precipitation	10.91	NOAA Avg Growing Season Precipitation	9.15
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground				X	
Comments:	little or no grass. creosote is dominant					

S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement				X	
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence			X		
Comments:	perennials were dormant and had no sign of inflorescence.					
H B	Litter Amount			X		
Comments:						
B	Annual Production					X
Comments:						
B	Invasive Plants			X		
Comments:	Creosote					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						

B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat					
Comments:	na					
B	Special Status Species Populations					
Comments:	Na					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	1	9
H	Hydrologic	0	0	1	2	8
B	Biotic	0	0	3	0	8

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	1	10
Biotic		0	3	8

Site Notes:

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 64083-XHIGHWAY-N001			
Legal Land Desc	SWSW 27 0140S 0250E Meridian 23	Acreage	880
Ecosite	042CY007NM LOAMY SD-3	Photo Taken	Y
Watershed	13060007080 HAGERMAN		
Observers	BRAUND/PIERCE/BURKHARDT	Observation Date	08/01/2012
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Rl	Soil Taxon Name	REAKOR
Texture Class	NM666 L	Soil Phase	REAKOR-TENCEE
Texture Modifier	NM666 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	7.51	NOAA Growing Season Precipitation	5.49
NOAA Avg Annual Precipitation	10.91	NOAA Avg Growing Season Precipitation	9.15
Disturbances and Animal Use:			

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S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground				X	
Comments:						
S H	Gullies					X

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence		X			
Comments:	High plant mortality, most likely due to drought conditions.					
H B	Litter Amount		X			
Comments:	a lot of good grasses but most are dormant with little to no seed heads.					
B	Annual Production					X
Comments:	Minimum production due to extremely dry conditions.					
B	Invasive Plants					X
Comments:						
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					X

Comments:						
B	Special Status Species Habitat					
Comments:	NA					
B	Special Status Species Populations					
Comments:	NA					

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Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	1	9
H	Hydrologic	0	1	0	2	8
B	Biotic	0	2	0	1	8

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic	A "Moderate to Extreme" rating was given for the Plant Mortality/Decadence Indicator due to the extreme drought conditions occurring in the area. Given an appropriate level of precipitation, this rating would change.	1	0	10
Biotic	Both the indicators for Plant Mortality/Decadence and Litter amount were rated as "Moderate to Extreme" based on the low level of production, number of dormant plants and the resulting low level of litter amount. These conditions are a direct result of the ongoing drought. Given an appropriate level of precipitation, the rating for these indicators would	2	0	9

	change. Overall, the Biotic conditions on this area are considered to Meet the standards for rangeland health.			
Site Notes:				